

length of sencilla, 48; anterolateral seta, 24; posterolateral seta, 29. The measurements for the second specimen, except for the sensillae which are lacking, are almost identical to those listed above.

The author is indebted to Dr. H. E. Ewing and Lieutenant George W. Wharton, USNR (Navy Medical Research Unit No. 2) who kindly compared the above described specimens with the type series and confirmed the identification. The specimens described in this note are deposited in the collection of the Rocky Mountain Laboratory, U. S. Public Health Service, Hamilton, Montana (A. P. No. 22052).

TWO NEW SPECIES OF MOSQUITOES OF THE GENUS *FICALBIA* FROM NETHERLANDS NEW GUINEA¹

By WILLARD V. KING, *Lt. Colonel*, and HARRY HOOGSTRAAL,
Captain, Sanitary Corps

Ficalbia (*Mimomyia*) *modesta*, new species

MALE.—*Head*: Proboscis slightly longer than fore femur, apical half somewhat swollen, basal two thirds with brownish-yellow scales, gradually becoming darker on apical third. Clypeus dark, nude. Palpus longer than proboscis by nearly half the length of apical segments which are swollen, dark scaled, and fused; long segment slightly swollen apically, brownish-yellow scaled. Antenna about as long as palpus, flagellum yellowish except for the two elongate terminal segments which are dark; dense, long pale hairs pointing forward mostly in two planes; torus dark with scattered small hairs. Eyes contiguous medianly. Vertex and lateral surface of head covered with broad, white to dusky scales with a faint metallic reflection; a small patch of dark upright forked scales at nape; long bristles along eye margin. *Thorax*: Scutum and posterior pronotal lobe dark brown, contrasting with the pale yellowish pleura. Scutum covered with slender dark scales which have a bronzy reflection in bright light, a few over wing base slightly paler, distinctly so on antescutellar space; long bristles arising from the anterior and lateral borders. Scutellum with scales similar to those on scutum. Postnotum dark, nude. Anterior pronotal lobe with long dark bristles, apparently unsealed. Posterior pronotal lobe with broad translucent scales, appearing dusky white in some lights, on upper half and posterior border; a row of five bristles along posterior border. Paratergite fairly large, pale in color and bare of scales. No spiracular or postspiracular bristles. Sternopleuron with a patch of broad white scales on upper posterior

¹From the 19th Medical General Laboratory, U. S. Army. Contribution Number 9 from the Entomology-Mammalogy Department.

half, extending as a line on lower half, and a row of long, fine yellowish bristles along upper and posterior border. Mesepimeron with a patch of fine bristles in upper posterior corner and a patch of fine hairs on lower half posteriorly. Propleuron unscaled, with about 10 bristles. Wing length about 2.5 mm.; squama fringed; wing scales rather sparse, all dark basally, slightly paler towards apex; outstanding scales of veins 2 to 4 short and broad, the apex of each either rounded or truncate; anterior fork cell almost equal to its stem and arising distinctly closer to apex of wing than the posterior cell; posterior cross vein more basal than mid by almost its own length; tip of anal vein abruptly curved to posterior border of wing well beyond fork of vein 5. Haltere pale basally, dark apically. Legs dark scaled with metallic reflection, the undersurface of the femora largely pale; fore and mid tarsal claws subequal, the larger claw of each toothed. *Abdomen*: Tergites with dark scales with a metallic reflection; tergites II to VII with inconspicuous basal pale lateral spots; long golden hairs arising apically from each segment. Sternites pale scaled. *Hypopygium* (Fig. 1): Ninth tergite with separated lobes (IX T-L), each bearing three to five stout bristles at different levels. Paraprocts (P) curved, heavily sclerotized apically, terminating in two or three large teeth. Phallosome thinly chitinous, hyaline, apparently a simple tube. Coxite (C) conical, nearly four times as long as mid width, clothed with scattered scales and moderately long setae; basal lobe (BL) small, triangular, in apposition to coxite, bearing two stout and two slender bristles. Style (S) about .6 as long as coxite, narrow, slightly curved apically; terminal appendage (TA) one-eighth length of style, the apical half with a narrow lamella.

FEMALE.—Similar to male except as follows: Proboscis dark scaled except ventrally on basal two-thirds which is mostly brownish-yellow; palpus one-fifth as long as proboscis, dark scaled, very slightly swollen at apex; antenna completely dark with a pale pubescence, a whorl of about five bristles arising near base of each flagellar segment (the first flagellar segment not elongate); scales on front part of vertex appear slightly darker than those on posterior half; posterior cross vein closer to wing base than mid by about half its own length; fore and mid tarsal claws equal, not toothed; eighth abdominal segment short, cerci completely retracted. Genitalia with three spermathecae, each of a different size.

LARVA.—Unknown.

Holotype.—Male, collected by the writers in a light trap at the edge of rain forest, about 250 feet elevation, Hollandia, Netherlands New Guinea, 23 January 1945. *Allotype*.—Female, same data as above. *Paratypes*.—2 males, 9 females, same data as above, except that the dates of collection are as follows: 12, 24 and 31 January 1945, 10, 15, 17, and 18 March 1945, and 12, 26 and 27 April 1945. Holotype, allotype and paratype material deposited in the United States National Museum, other paratypes in the Museum of the Division of

Economic Entomology, Council for Scientific and Industrial Research, Canberra, A. C. T., Australia.

This species differs from *Ficalbia (Mimomyia) metallica* Leic. of the Malayan subregion (also said to occur in the New Guinea region), in at least the following characters: distinctive area of yellow scales near wing roots absent, abdomen without a continuous median longitudinal stripe, and first fork cell almost equal its stem rather than only half the length of its stem. In the latter respect this species likewise differs from *F. (M.) chamberlaini* (Ludlow, Oriental Region and Philippines), as well as in the absence of tarsal and tibial markings, presence of lateral abdominal spots, and less conspicuous lateral scutal ornamentation. *F. (M.) metallica* was not taken by us in New Guinea. At Hollandia the only other described species of the genus taken was *F. (Etorleptomomyia) elegans* (Taylor), a very brightly ornamented species, also from light trap collections.

From the trap operated at the edge of a rain forest on 115 nights between January and June, four males and twenty females were taken. None were taken in May and only one female in February. Another trap nearby but in the large laboratory clearing, attracted only one male and two females during this period. Specimens not mentioned as types were damaged too badly in transit from New Guinea to be used. A single *Ficalbia* larva collected by the writers in a grassy side pool of a river at Hollandia is similar to that of *F. (M.) chamberlaini* (as described by Barraud, 1934, p. 110) except that head hair C has 3 branches rather than 6 to 8, and that the lateral comb scales are 26 in number rather than 10 to 16. This specimen may well be that of *modesta* but was not definitely associated with an adult.

Ficalbia (Mimomyia) flavens, new species

MALE.—Similar to *F. modesta* except as follows: general color paler; basal three-fourths of proboscis covered with yellowish scales laterally and ventrally; long segment of palpus yellow scaled except for a dark tip and dorsal dark stripe, the apical clubbed segment with a large yellowish spot below on basal half; scutal integument dark centrally but pale brown laterally, forming a wide contrasting border that extends onto posterior pronotum and side lobe of scutellum; scales on the pale border black on fossa, bright golden posterior to this area, especially over wing roots; posterior pronotum and all pleurites bare of scales; lower mesepimeron without a patch of hairs (possibly denuded); first fork cell of wing five-sevenths as long as stem, its base slightly distal to that of second; wing scales distinctly pale for a short distance near base of costa and vein 1. *Hypopygium*: exomite about three times as long as its mid width, the apical half distinctly thicker than in *modesta*;

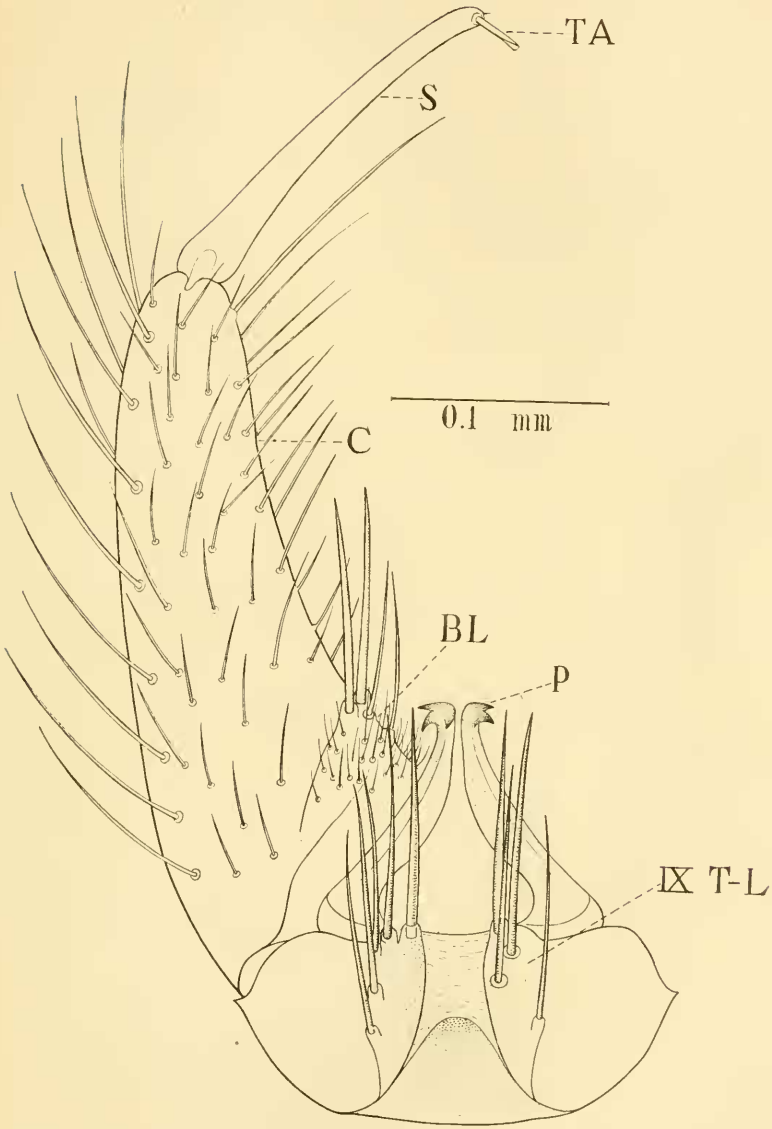


Fig. 1. Male Hypopygium of *Ficalbia (Mimomyia) modesta* new species

style longer, about .75 of coxite; terminal appendage about one-sixth length of style; lobes of ninth tergite each with three apical bristles; basal lobe of coxite with only two stout bristles visible (mount rather poor).

Female and larva unknown.

Holotype.—Male collected by the writers in a light trap at edge of rain forest, about 250 feet elevation, Hollandia, Netherlands New Guinea, 27 April 1945; deposited in the United States National Museum.

Although represented by only one specimen not in the best of condition, this form appears sufficiently distinct from *modesta* and other known species to warrant naming. The contrasting colors of the scutum are very noticeable, whereas in the type series of *modesta* the integument is uniformly dark, as is also the lateral scaling except for a very few pale scales over wing root in some specimens. In the paratypes of *modesta*, at least a few scales are present on the sternopleuron and usually on the posterior pronotum in even the poorest specimens. Since these sclerites in *flavens* are not entirely denuded of bristles, it is unlikely that the absence of scales is due merely to denudation.

LITERATURE CITED

- Barraud, P. J., 1934, The Fauna of British India, Diptera, vol. 5, Taylor and Francis, London.

Actual date of publication, OCT 11 1946